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Title Force measurement in the 1.5m tunnel on the SARAS aircraft model with powered propellers

Author/s R Mukund and M S Kamalashiah

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Abstract

Experiments have been conducted in the 1.5m low speed wind tunnel on the 1/10 scale SARAS aircraft model having powered propellers. The primary motivation for these experiments has been to assess the propeller performance in the presence of the nacelle, the fuselage and the stub wing connecting the two. Force measurements using a sting mounted balance and tuft visualization experiments were made on the Saras aircraft model in its pusher-propeller configuration.

The results indicate that the forces measured are consistent with previous tests without propellers. The thrust developed by the propellers does not show much change in the presence of the installations.